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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,405

01/05/2005

Johann Bonn

263493US0PCT

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05/05/2008

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ALEXANDRIA, VA 22314

EXAMINER

METZMAIER, DANIEL S

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

05/05/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/519,405	<b>Applicant(s)</b> BONN ET AL.	
	<b>Examiner</b> Daniel S. Metzmaier	<b>Art Unit</b> 1796	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9,12-16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,16,18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1, 3-9, 12-16 and 18-19 are pending.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 February 2008 has been entered.

#### ***Election/Restrictions***

2. Claims 12-15 have withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 26 April 2007.

The requirement is still deemed proper and was therefore made FINAL in the Office Action mailed 25 June 2007.

3. This application contains claims 12-15 drawn to an invention nonelected with traverse in the reply filed on 26 April 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Objections***

4. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. All the limitations of claim 3 appear in claim 1. Claim 3 does not appear to further limit claim 1.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-4, 7-9 and 18-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Henkel KgaA, DE 198 57 204 A, as evidenced by Millhoff et al, US 6,340,662. Millhoff et al is English language family equivalent to Henkel. See Table 1.

To the extent the Millhoff et al reference differs from the claims in the concentration of the combination, the Millhoff et al reference discloses the ratio reading

on that claimed in claim 4 and concentrations that are claimed in claim 8. The compositions are otherwise anticipated and employed in the same utility. Applicants have not shown the instant claim language distinguishes the claims from the disclosed compositions. See MPEP 2112(III) and (V).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henkel KgaA, DE 198 57 204 A, as evidenced by Millhoff et al, US 6,340,662. Millhoff et al is English language family equivalent to Henkel. See Table 1. The citations hereafter refer to the Millhoff et al '662, which is the same or substantially the disclosure as Henkel KgaA.

Henkel KgaA and Millhoff et al differ from claim 5 in the ratio of the polyglyceryl esters to bisamides of 3:1 to 1.5:1.

Henkel KgaA and Millhoff et al (claim 1) discloses the use of 2 to 15 % by weight of nonionic emulsifier. At 15 % by weight of polyglyceryl esters, the polyglyceryl ester to bisamide ratio of the example would be about 2.5 : 1.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to vary the concentrations of the polyglyceryl ester emulsifiers disclosed in the Henkel KgaA and Millhoff et al references for the advantage of providing a homogeneous dispersion of the defoaming agents in said dispersion at their point of use.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Henkel KgaA, DE 198 57 204 A, as evidenced by Millhoff et al, US 6,340,662, in view of Schuhmacher et al, US 5,700,351, or Wegner et al, US 5,236,499. Millhoff et al is

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English language family equivalent to Henkel. See Table 1. The citations hereafter refer to the Millhoff et al '662, which is the same or substantially the disclosure as Henkel KgaA.

The Millhoff et al reference differs from claims 16 and 17 in the use of triglyceryl fatty acid diesters rather than mixed glycerol esters.

Schuhmacher et al and Wegner et al (title and abstract) disclose defoaming compositions for the paper industry in the form of oil-in-water emulsions employing fatty alcohols, hydrocarbons (e.g., oils), esters and polyglyceryl esters having at least 20% esterification of a polyglyceryl mixture.

These references are combinable because they teach aqueous dispersions as defoaming compositions for the paper industry. It would have been *prima facie* obvious to one of ordinary skill in the art at the time of applicants' invention to employ the aqueous compositions of Schuhmacher et al and Wegner et al with those of Kavchok et al for the purpose of defoaming paper industry processes as a point of law.

It is generally *prima facie* obvious to use in combination two or more ingredients that have previously been used separately for the same purpose in order to form a third composition useful for that same purpose. *In re Kerkhoven*, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980); *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971); *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960). As stated in *Kerkhoven* and *Crockett*, the idea of combining them flows logically from their having been individually taught in the prior art.

Furthermore, it would have been *prima facie* obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the art recognized secondary components as a dispersion of hydrophobic solid in a water insoluble liquid taught in the Millhoff et al reference for aqueous defoaming dispersions into the aqueous dispersions of Schuhmacher et al and Wegner et al for the defoaming properties of the dispersed hydrophobic solids.

10. Claims 1, 3-9, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavchok et al, US 4626,377, taken with Schuhmacher et al, US 5,700,351, or Wegner et al, US 5,236,499. Kavchok et al (column 3, lines 37-54; example and claims) discloses aqueous hydrophobic defoaming dispersions employing a fatty alcohol of 14-28 carbon atoms, a fatty acid, fatty soap, a nonionic surfactant and a secondary hydrophobic solid dispersion in a water insoluble liquid including bisamides dispersed in mineral oil (example 4 and claims). Kavchok et al (column 1, lines 21 et seq) discusses foaming as a problem in a number of chemical industries including the pulp and paper industries.

Kavchok et al differs from the claims in the incorporation of a polyglyceryl ester into the compositions.

Schuhmacher et al and Wegner et al (title and abstract) disclose defoaming compositions for the paper industry in the form of oil-in-water emulsions employing fatty alcohols, hydrocarbons (e.g., oils), esters and polyglyceryl esters having at least 20% esterification of a polyglyceryl mixture.

These references are combinable because they teach aqueous dispersions as defoaming compositions for the paper industry. It would have been *prima facie* obvious to one of ordinary skill in the art at the time of applicants' invention to employ the aqueous compositions of Schuhmacher et al and Wegner et al with those of Kavchok et al for the purpose of defoaming paper industry processes as a point of law.

It is generally *prima facie* obvious to use in combination two or more ingredients that have previously been used separately for the same purpose in order to form a third composition useful for that same purpose. *In re Kerkhoven*, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980); *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971); *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960). As stated in *Kerkhoven* and *Crockett*, the idea of combining them flows logically from their having been individually taught in the prior art.

Furthermore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of applicants' invention to employ the art recognized secondary components as a dispersion of hydrophobic solid in a water insoluble liquid taught in the Kavchok et al reference for aqueous defoaming dispersions into the aqueous dispersions of Schuhmacher et al and Wegner et al for the defoaming properties of the dispersed hydrophobic solids.

### ***Response to Arguments***

11. Applicant's arguments filed 15 February 2008 have been fully considered but they are not persuasive.



12. Applicants (page 7 of response) assert the Millhoff et al reference neither discloses nor suggest the claimed hydrophobic compound since the hydrocarbons have been deleted from the claims. This has not been deemed persuasive since the claims set forth hydrophobic compounds including alkoxylated fatty alcohols. the Millhoff et al reference (Table 1) discloses 3x ethoxylates of C12-14 fatty alcohols and 7x ethoxylates of C12-16. At least the 3x ethoxylates of C12-14 fatty alcohols would be hydrophobic as claimed.

13. Applicants (page 7) assert the secondary references to Schuhmacher et al or Wegner et al do not remedy the deficiencies of the Millhoff et al reference. This has not been deemed persuasive for the reasons set forth above.

14. Applicants (page 8) assert the Kavchok et al reference requires fatty acids, which have been deleted from the claimed alternatives. This has not been deemed persuasive since the Kavchok et al reference further incorporates fatty alcohols of 14-28 carbon atoms, which reads on the claimed fatty alcohols of at least 12 carbon atoms. The claimed compositions employ open transitional language and would not exclude the further addition of other components, such as fatty acids.

15. Applicants (page 8) assert the secondary references to Schuhmacher et al or Wegner et al do not remedy the deficiencies of the Kavchok et al reference. This has not been deemed persuasive for the reasons set forth above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Daniel S. Metzmaier/  
Primary Examiner, Art Unit 1796**

DSM